

METHOD AND DEVICE FOR EMERGENCY REPORTING AND VEHICLE EMERGENCY REPORTING SYSTEM

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Abstract

PROBLEM TO BE SOLVED: To provide an emergency reporting method and device with which a center operator can easily grasp an accident situation and the number of passengers by detecting the number of passengers with a seat sensor or a seatbelt fastening sensor provided to an on-vehicle machine which detects weight applied to seat and transmitting the number of the passengers in addition to position information and accident situation information with radio equipment.

SOLUTION: This emergency reporting device 5 mounted on a vehicle is provided with a GPS receiving part 8 which is connected to a GPS antenna 9 and receives data from a GPS satellite, a gyroscope 10, a vehicle speed pulse detecting part (speed sensor) 11, a collision detecting part (collision sensor) 12, a seat weight detecting part (seat sensor) 13 detecting seat weight applied to a seat, a seatbelt fastening detecting part (seatbelt fastening sensor) 14 detecting that a seatbelt is fastened and a public portable telephone (radio equipment) 6 and is further provided with a controlling part 7 controlling them.

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CLAIMS

[Claim(s)]

[Claim 1] The emergency call approach including the phase which detects the load to a sheet and detects the number of crew staffs, and the phase of transmitting said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[Claim 2] The emergency call approach including the phase which detects the wearing condition of a seat belt and detects the number of crew staffs, and the phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[Claim 3] The emergency call approach including the phase which detects the load to a sheet, or detects the wearing condition of a seat belt, and detects the number of crew staffs, and the phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[Claim 4] The emergency call unit which possesses a means to transmit the number information of entrainment staffs for positional information and the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, in the center which detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line.

[Claim 5] The emergency call unit which possesses a means to transmit the number information of entrainment staffs for positional information and the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line, in the center which detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line.

[Claim 6] the center which detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and The emergency call unit possessing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line.

[Claim 7] the center which detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the

emergency call unit of an accident car, and the number information of entrainment staffs, The emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car.

[Claim 8] the center which detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, The emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car.

[Claim 9] the center which detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and The emergency call unit possessing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, The emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] Especially this invention detects the number of entrainment staffs about the emergency call approach and equipment using the sheet sensor which detects the load to a sheet, or a seat belt wearing sensor, and it constitutes it so that the number of entrainment staffs may be transmitted to a center with accident data at the time of the occurrence of accident.

[0002]

[Description of the Prior Art] In the traffic accident, time amount until it treats from the occurrence of accident to the beginning is closely concerned with the survival rate. Therefore, as shown in drawing 1, car emergency intelligence is automatically notified to the urgent center 2 from the emergency call unit carried in the accident car 1 at the time of the occurrence of accident of the collision of a car etc., and the car emergency reporting system aiming at reduction of the death toll or the number of severely handicapped persons is proposed by shortening time amount until the urgent car 4 arrives at an accident site, and enabling it to rescue and relieve a wounded person more quickly. In such a car emergency reporting system, in order to perform the mobilization request of the emergency car 4 in addition to the on-site location at the time of the occurrence of accident, the technique which receives the information for grasping the number of staffs which has taken the accident car 1 is indispensable.

[0003] Usually, the emergency call unit carried in a car is equipped with the following functions.

- (1) Communication facility : it has the same communication facility as a portable telephone, and the automatic change to data communication and voice communication is enabled.
- (2) Location detection function : record self-vehicle location data, such as a sensor and a gyroscope, whenever [GPS or vehicle speed] as data for car location detection.
- (3) Urgent detection function : it has a collision location detection sensor and a sideslip sensor, and detect what kind of accident occurred.
- (4) Car emergency call function : start an emergency call by detection of a collision location detection sensor or a sideslip sensor, and transmit the recorded self-vehicle location data automatically. The manual report by the depression of a car emergency intelligence report carbon button is also enabled.

[0004] Giving the position-report function at the time of the occurrence of accident to the navigation equipment which displays the transit location of a car like this emergency call unit is proposed. For example, this kind of navigation equipment is indicated by JP,5-5626,A.

[0005] The location device with which this equipment asks for the self-vehicle location of a car, and the acceleration sensor as an accident occurrence detection means, It has the control apparatus which memorizes the self-vehicle location data for which the location device asked, and is outputted at the time of the occurrence of accident, and the communication device which is the transmitting means of data. A location device The bearing sensor which detects transit bearing of a car, and the distance robot which detects the mileage of a car, It has the absolute location decision sensor which receives GPS data,

CDROM in which the telephone number of map data or a contact was stored, and CPU displayed on a display in quest of a self-vehicle location from the information on each sensor.

[0006] And if a car encounters accident, it is automatically transmitted by the trauma center, and the self-vehicle location data currently recorded on the emergency call unit of an accident car will check the location of an accident car based on this data, and will demand mobilization of an urgent car in a trauma center.

[0007]

[Problem(s) to be Solved by the Invention] In the conventional emergency reporting system, an automobile accident occurs and the problem that it cannot judge whether the wounded person of a multiple name generates [crew] an urgent car (ambulance) in plurality in case a mobilization request is performed to an accident site, and it is necessary to mobilize two or more ambulances exists.

[0008] This invention detects the number of crew staffs by the sheet sensor which detects the load to a sheet to a mounted machine (emergency call unit), or the seat belt wearing sensor, and as it transmits the above-mentioned number of crew staffs from a walkie-talkie in addition to positional information and accident status information, it aims at offering the emergency call approach and equipment with which a center operator can grasp an accident situation and the number of entrainment staffs easily.

[0009]

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, in this invention, whenever [GPS, gyroscope, and vehicle-speed], a sensor, a collision sensor, a public cellular phone (walkie-talkie), and the load to a sheet are constituted from the sheet sensor or the seat belt wearing sensor which detects the emergency call unit carried in a car, in addition to calculation of a car location, the number of entrainment staffs is detected, and on-site positional information and the number information of entrainment staffs are transmitted to a center by data communication at an emergency call unit at the time of the occurrence of accident.

[0010] Moreover, he is trying to express the received on-site location and the number of entrainment staffs as center equipment.

[0011] By having considered as such a configuration, a center equipment operator becomes possible [performing the mobilization request of a suitable urgent car] by grasping an accident situation and the number of entrainment staffs.

[0012]

[Embodiment of the Invention] A center operator has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs by including the phase which invention of this invention according to claim 1 detects the load to a sheet, and detects the number of crew staffs, and the phase of transmitting said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0013] A center operator has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs by including the phase which invention of this invention according to claim 2 detects the wearing condition of a seat belt, and detects the number of crew staffs, and the phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0014] The phase which invention of this invention according to claim 3 detects the load to a sheet, or detects the wearing condition of a seat belt, and detects the number of crew staffs, By including the phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information, a center operator It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs.

[0015] the center which invention of this invention according to claim 4 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs.

[0016] the center which invention of this invention according to claim 5 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs.

[0017] the center which invention of this invention according to claim 6 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and By providing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line, it has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs.

[0018] the center which invention of this invention according to claim 7 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car. It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping compaction, and an accident situation and the number of entrainment staffs for the time of arrival to the accident site of an urgent car.

[0019] the center which invention of this invention according to claim 8 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car. It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping compaction, and an accident situation and the number of entrainment staffs for the time of arrival to the accident site of an urgent car.

[0020] the center which invention of this invention according to claim 9 detects emergencies, such as the

occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and The emergency call unit possessing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car. It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping compaction, and an accident situation and the number of entrainment staffs for the time of arrival to the accident site of an urgent car.

[0021] Hereafter, the gestalt of operation of this invention is explained using a drawing. Drawing 2 is drawing showing the outline configuration of the emergency call unit concerning the gestalt of operation of this invention. The emergency call unit 5 carried in the car in drawing 2 It connects with the GPS antenna 9. Data from a GPS Satellite Having been equipped with the GPS receive section 8 which receives, a gyroscope 10, the vehicle speed pulse detecting element (whenever [vehicle speed] sensor) 11, the collision-detection section (collision sensor) 12, the sheet load detecting element (sheet sensor) 13 that detects the sheet load which joins a sheet, and the seat belt It has the seat belt wearing detecting element (seat belt wearing sensor) 14 to detect and the public cellular phone (walkie-talkie) 6, and consists of control sections 7 which control these further.

[0022] And calculation of the car location according to the GPS receive section 8 and a gyroscope 10 with an emergency call unit 5, Moreover, information is accumulated [whenever / vehicle speed] whenever [vehicle speed] for every change and every fixed time amount by the vehicle speed pulse detecting element (whenever [vehicle speed] sensor) 11. Furthermore, the sheet load which joins a sheet by the sheet load detecting element (sheet sensor) 13 is detected. Or it accumulates in the memory which detects having been equipped with the seat belt by the seat belt wearing detecting element (seat belt wearing sensor) 14, computes an entrainment number number from these data, and is not illustrating a control section 7.

[0023] And if the collision-detection section (collision sensor) 12 operates at the time of the occurrence of accident, information and the number of entrainment staffs will be transmitted to a trauma center (refer to drawing 1) by data communication whenever [on-site positional information / which has been accumulated from the public cellular phone (walkie-talkie) 6 /, and vehicle speed].

[0024]

[Effect of the Invention] As mentioned above, a center operator has the effectiveness it is ineffective to it being possible to perform the mobilization request of a suitable urgent car by grasping an accident situation and the number of entrainment staffs by including the phase which detects the load to a sheet and detects the number of crew staffs by the emergency call approach of this invention, and the phase transmit said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0025] the center which detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line in the emergency call unit of this invention -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line It has the effectiveness it is ineffective to it being possible to perform the mobilization request of a suitable urgent car by grasping an accident situation and the number of entrainment staffs.

[0026] the center which detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line in the emergency reporting system of this invention - positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, It is what has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car. It has the effectiveness it is ineffective to it being possible to perform the mobilization request of a suitable urgent car by grasping compaction, and an accident situation and the number of entrainment staffs for the time of arrival to the accident site of an urgent car.

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TECHNICAL FIELD

[Field of the Invention] Especially this invention detects the number of entrainment staffs about the emergency call approach and equipment using the sheet sensor which detects the load to a sheet, or a seat belt wearing sensor, and it constitutes it so that the number of entrainment staffs may be transmitted to a center with accident data at the time of the occurrence of accident.

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PRIOR ART

[Description of the Prior Art] In the traffic accident, time amount until it treats from the occurrence of accident to the beginning is closely concerned with the survival rate. Therefore, as shown in drawing 1 , car emergency intelligence is automatically notified to the urgent center 2 from the emergency call unit carried in the accident car 1 at the time of the occurrence of accident of the collision of a car etc., and the car emergency reporting system aiming at reduction of the death toll or the number of severely handicapped persons is proposed by shortening time amount until the urgent car 4 arrives at an accident site, and enabling it to rescue and relieve a wounded person more quickly. In such a car emergency reporting system, in order to perform the mobilization request of the emergency car 4 in addition to the on-site location at the time of the occurrence of accident, the technique which receives the information for grasping the number of staffs which has taken the accident car 1 is indispensable.

[0003] Usually, the emergency call unit carried in a car is equipped with the following functions.

- (1) Communication facility : it has the same communication facility as a portable telephone, and the automatic change to data communication and voice communication is enabled.
- (2) Location detection function : record self-vehicle location data, such as a sensor and a gyroscope, whenever [GPS or vehicle speed] as data for car location detection.
- (3) Urgent detection function : it has a collision location detection sensor and a sideslip sensor, and detect what kind of accident occurred.
- (4) Car emergency call function : start an emergency call by detection of a collision location detection sensor or a sideslip sensor, and transmit the recorded self-vehicle location data automatically. The manual report by the depression of a car emergency intelligence report carbon button is also enabled.

[0004] Giving the position-report function at the time of the occurrence of accident to the navigation equipment which displays the transit location of a car like this emergency call unit is proposed. For example, this kind of navigation equipment is indicated by JP,5-5626,A.

[0005] The location device with which this equipment asks for the self-vehicle location of a car, and the acceleration sensor as an accident occurrence detection means, It has the control apparatus which memorizes the self-vehicle location data for which the location device asked, and is outputted at the time of the occurrence of accident, and the communication device which is the transmitting means of data. A location device The bearing sensor which detects transit bearing of a car, and the distance robot which detects the mileage of a car, It has the absolute location decision sensor which receives GPS data, CDROM in which the telephone number of map data or a contact was stored, and CPU displayed on a display in quest of a self-vehicle location from the information on each sensor.

[0006] And if a car encounters accident, it is automatically transmitted by the trauma center, and the self-vehicle location data currently recorded on the emergency call unit of an accident car will check the location of an accident car based on this data, and will demand mobilization of an urgent car in a trauma center.

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EFFECT OF THE INVENTION

[Effect of the Invention] As mentioned above, a center operator has the effectiveness it is ineffective to it being possible to perform the mobilization request of a suitable urgent car by grasping an accident situation and the number of entrainment staffs by including the phase which detects the load to a sheet and detects the number of crew staffs by the emergency call approach of this invention, and the phase transmit said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0025] Emergencies, such as the occurrence of a car of accident, are detected in the emergency call unit of this invention. It has the effectiveness it is ineffective to it being possible to perform the mobilization request of a suitable urgent car by grasping an accident situation and the number of entrainment staffs by providing a means transmit the number information of entrainment staffs for positional information and the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet through a mobile communication line to collection, and a means store and a center, in the center which performs relief rescue etc. through a mobile communication line.

[0026] Emergencies, such as the occurrence of a car of accident, are detected in the emergency reporting system of this invention. the center which performs relief rescue etc. through a mobile communication line - positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, It is what has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car. It has the effectiveness it is ineffective to it being possible to perform the mobilization request of a suitable urgent car by grasping compaction, and an accident situation and the number of entrainment staffs for the time of arrival to the accident site of an urgent car.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] In the conventional emergency reporting system, an automobile accident occurs and the problem that it cannot judge whether the wounded person of a multiple name generates [crew] an urgent car (ambulance) in plurality in case a mobilization request is performed to an accident site, and it is necessary to mobilize two or more ambulances exists.

[0008] This invention detects the number of crew staffs by the sheet sensor which detects the load to a sheet to a mounted machine (emergency call unit), or the seat belt wearing sensor, and as it transmits the above-mentioned number of crew staffs from a walkie-talkie in addition to positional information and accident status information, it aims at offering the emergency call approach and equipment with which a center operator can grasp an accident situation and the number of entrainment staffs easily.

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MEANS

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, in this invention, whenever [GPS, gyroscope, and vehicle-speed], a sensor, a collision sensor, a public cellular phone (walkie-talkie), and the load to a sheet are constituted from the sheet sensor or the seat belt wearing sensor which detects the emergency call unit carried in a car, in addition to calculation of a car location, the number of entrainment staffs is detected, and on-site positional information and the number information of entrainment staffs are transmitted to a center by data communication at an emergency call unit at the time of the occurrence of accident.

[0010] Moreover, he is trying to express the received on-site location and the number of entrainment staffs as center equipment.

[0011] By having considered as such a configuration, a center equipment operator becomes possible [performing the mobilization request of a suitable urgent car] by grasping an accident situation and the number of entrainment staffs.

[0012]

[Embodiment of the Invention] A center operator has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs by including the phase which invention of this invention according to claim 1 detects the load to a sheet, and detects the number of crew staffs, and the phase of transmitting said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0013] A center operator has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs by including the phase which invention of this invention according to claim 2 detects the wearing condition of a seat belt, and detects the number of crew staffs, and the phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0014] The phase which invention of this invention according to claim 3 detects the load to a sheet, or detects the wearing condition of a seat belt, and detects the number of crew staffs, By including the phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information, a center operator It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs.

[0015] the center which invention of this invention according to claim 4 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line It has an

operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs.

[0016] the center which invention of this invention according to claim 5 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs.

[0017] the center which invention of this invention according to claim 6 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and By providing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line, it has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping an accident situation and the number of entrainment staffs.

[0018] the center which invention of this invention according to claim 7 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car. It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping compaction, and an accident situation and the number of entrainment staffs for the time of arrival to the accident site of an urgent car.

[0019] the center which invention of this invention according to claim 8 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car. It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping compaction, and an accident situation and the number of entrainment staffs for the time of arrival to the accident site of an urgent car.

[0020] the center which invention of this invention according to claim 9 detects emergencies, such as the occurrence of a car of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and The emergency call unit possessing a means to store, and a means to transmit

the number information of entrainment staffs to a center through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of an accident car, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of an accident car. It has an operation that performing the mobilization request of a suitable urgent car makes it possible, by grasping compaction, and an accident situation and the number of entrainment staffs for the time of arrival to the accident site of an urgent car.

[0021] Hereafter, the gestalt of operation of this invention is explained using a drawing. Drawing 2 is drawing showing the outline configuration of the emergency call unit concerning the gestalt of operation of this invention. The emergency call unit 5 carried in the car in drawing 2 It connects with the GPS antenna 9. Data from a GPS Satellite Having been equipped with the GPS receive section 8 which receives, a gyroscope 10, the vehicle speed pulse detecting element (whenever [vehicle speed] sensor) 11, the collision-detection section (collision sensor) 12, the sheet load detecting element (sheet sensor) 13 that detects the sheet load which joins a sheet, and the seat belt It has the seat belt wearing detecting element (seat belt wearing sensor) 14 to detect and the public cellular phone (walkie-talkie) 6, and consists of control sections 7 which control these further.

[0022] And calculation of the car location according to the GPS receive section 8 and a gyroscope 10 with an emergency call unit 5, Moreover, information is accumulated [whenever / vehicle speed] whenever [vehicle speed] for every change and every fixed time amount by the vehicle speed pulse detecting element (whenever [vehicle speed] sensor) 11. Furthermore, the sheet load which joins a sheet by the sheet load detecting element (sheet sensor) 13 is detected. Or it accumulates in the memory which detects having been equipped with the seat belt by the seat belt wearing detecting element (seat belt wearing sensor) 14, computes an entrainment number number from these data, and is not illustrating a control section 7.

[0023] And if the collision-detection section (collision sensor) 12 operates at the time of the occurrence of accident, information and the number of entrainment staffs will be transmitted to a trauma center (refer to drawing 1) by data communication whenever [on-site positional information / which has been accumulated from the public cellular phone (walkie-talkie) 6 / , and vehicle speed].

[Translation done.]

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- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] Drawing showing the outline configuration of an emergency reporting system,

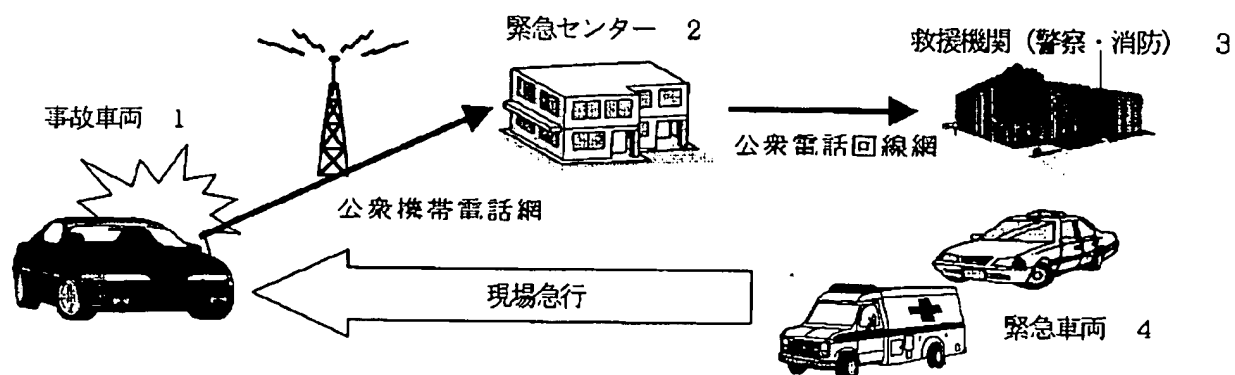
[Drawing 2] It is drawing showing the outline configuration of the emergency call unit concerning the gestalt of operation of this invention.

[Description of Notations]

- 1 Accident Car
- 2 Trauma Center
- 3 Relief Engine (Police and Fire Fighting)
- 4 Urgent Car
- 5 Emergency Call Unit
- 6 Public Cellular Phone (Walkie-talkie)
- 7 Control Section
- 8 GPS Receive Section
- 9 GPS Antenna
- 10 Gyroscope
- 11 Vehicle Speed Pulse Detecting Element
- 12 Collision-Detection Section
- 13 Sheet Load Detecting Element
- 14 Seat Belt Wearing Detecting Element

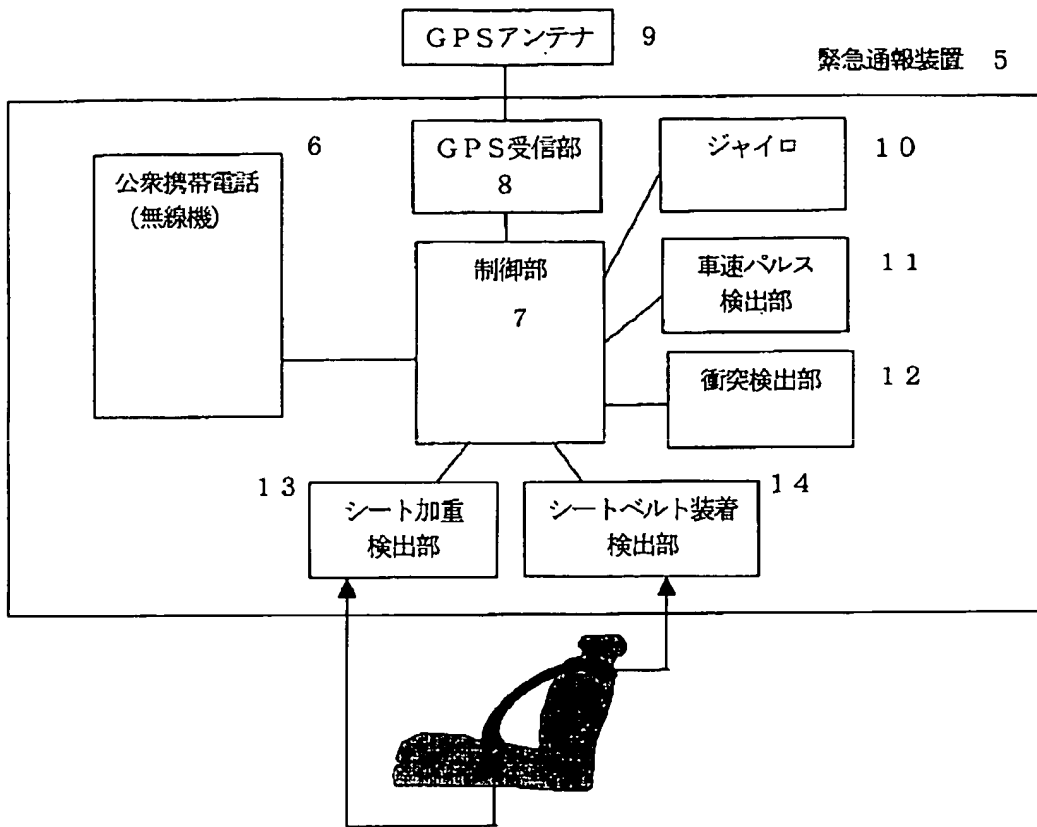
[Translation done.]

Drawing selection drawing 1



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Drawing selection 

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